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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/724,622	11/28/2000	Irwin J. Singer	KCC-15,287	8443

35844 7590 10/05/2004

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EXAMINER
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WACHTEL, ALEXIS A

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/724,622

Applicant(s)

SINGER ET AL.

Examiner

Alexis Wachtel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-19 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-19,21-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10-21-02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Detailed Action***

***Response to Amendment***

1. Applicant's amendment and accompanying Remarks filed 12-2-02 have been entered and carefully considered. The new grounds of rejection render Applicant's arguments moot.

Claims 2,5 and 20 are cancelled without prejudice.

2. Claims 1,3,4,6-19,21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4714647 to Shipp, Jr. et al and US 5817584 to Singer et al as set forth in section 2 of the previous office action.

Shipp, Jr. et al is directed to a filter medium formed by sequentially depositing layers of meltblown thermoplastic fibers having the same composition but different sizes onto a collector. The resulting laminate web has a fiber size gradient so that large particulate can be trapped across the filter's depth without prematurely plugging the fine fiber, high efficiency layers (Abstract). Meltblown webs of microfibers are useful as filter media, absorbent materials, moisture barriers, insulators and wipes (Col 1, lines 32-35). It is known to use fine fibers having a diameter of from 0.5 to 10 microns and larger fibers having a diameter of greater than 10 microns to make a gradient depth filter (Col 2, lines 64-68, Col 3, lines 1-12). Another embodiment contemplates composite webs in which the fiber size gradient may increase or decrease across the full depth of the composite web (Col 7, lines 15-27).

Shipp, Jr. et al fails to teach sandwiching the meltblown web between two spun bond nonwoven webs. Singer et al is directed to nonwovens used as filters (Col 1, lines

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5-10) that have an SMS spunbond/meltblown/spunbond configuration (Col 1, lines 21-25). Examiner notes that the meltblown web in filters is the filtering medium and is, and lacks durability without reinforcing means such as afforded by spunbonded webs. In view of this teaching it would have been obvious for one of ordinary skill in the art at the time the invention was made to have employed an SMS construction for reinforcing the meltblown web of Shipp, Jr. et al motivated by the desire to obtain a filter that is durable.

Regarding claims 9,10,12 and 13, although the claimed permeability and opacity are not explicitly taught by Singer et al or EP 0729375 B1, it is reasonable to presume that said limitations would be met by the combination of the two references. Support for said presumption is found in the use of similar materials (i.e. gradient sized meltblown web sandwiched between two spunbonded webs) and in the similar production steps (i.e.laminating spunbond webs to meltblown web) used to produce the SMS composite fabric. The burden is upon the applicant to prove otherwise.

Regarding claims 21-26, Applicant's disclosure discloses that known uses for SMS type laminates include medical gowns, drapes, garments, wraps, shoe covers and towels (Background of Invention, pp.2, Specification). In view of this teaching it would have been obvious for one of ordinary skill in the art at the time the invention was made to have used the SMS composite fabric of Singer et al and EP 0729375 B1 for the disclosed applications. One of ordinary skill in the art would have been motivated by the desire to use the SMS composite fabric in applications for which SMS fabrics are well suited.


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**Conclusion**

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex Wachtel whose telephone number is 571-272-1455. The examiner can normally be reached on 10:30am to 6:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Glenn Caldarola, can be reached at (571)-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Glenn Caldarola  
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